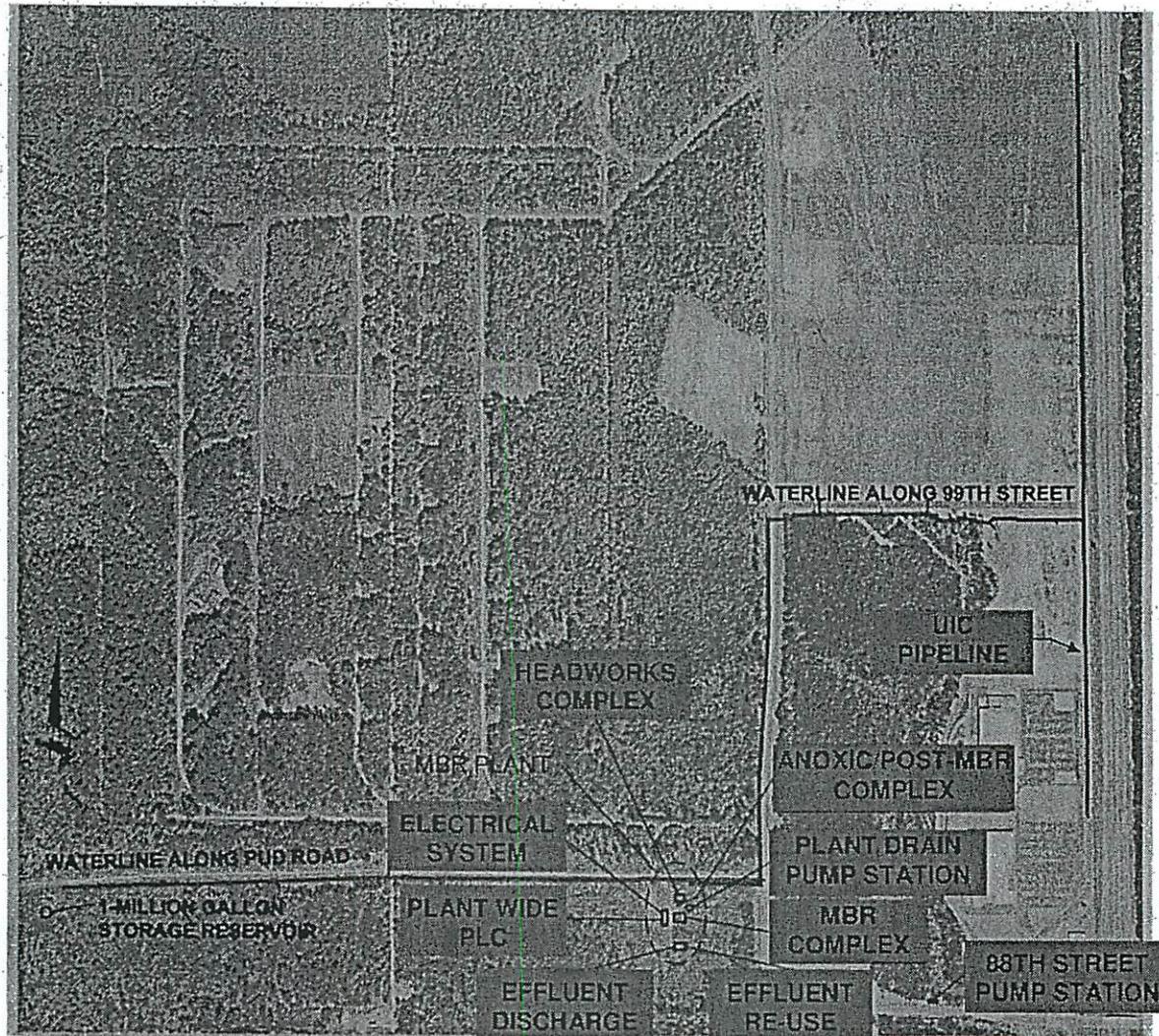


5/27/09 field trip
handouts

TULALIP TRIBES WASTEWATER TREATMENT AND REUSE FACILITY SITE OVERVIEW



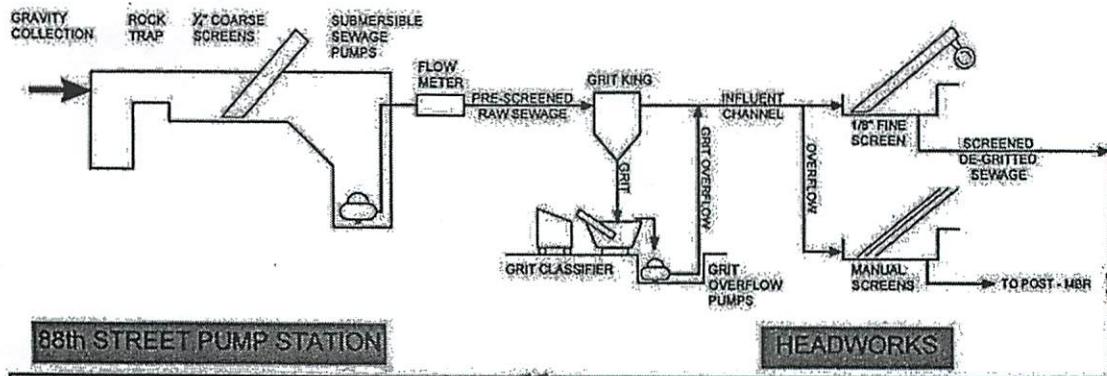


© 2005 AE
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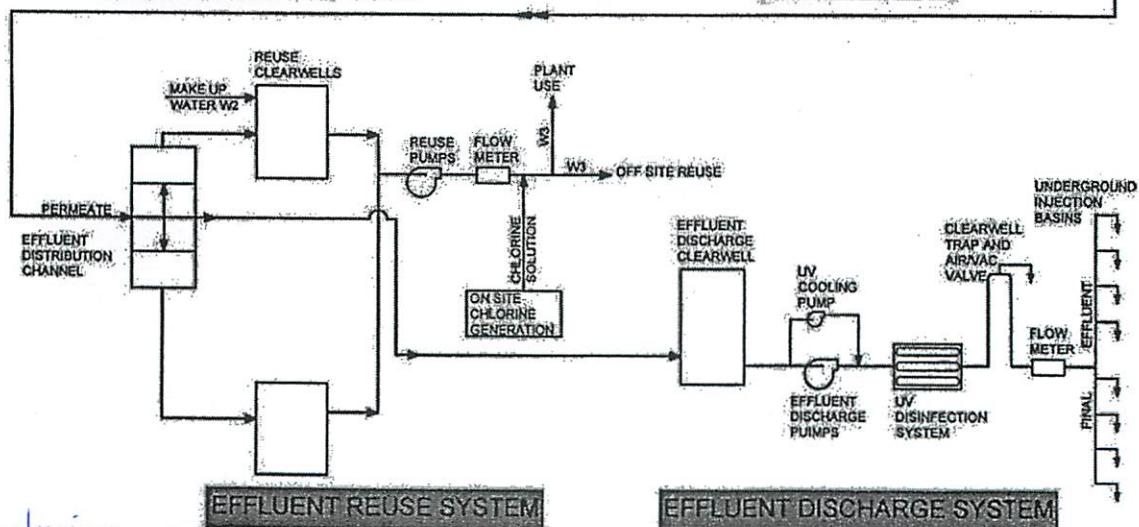
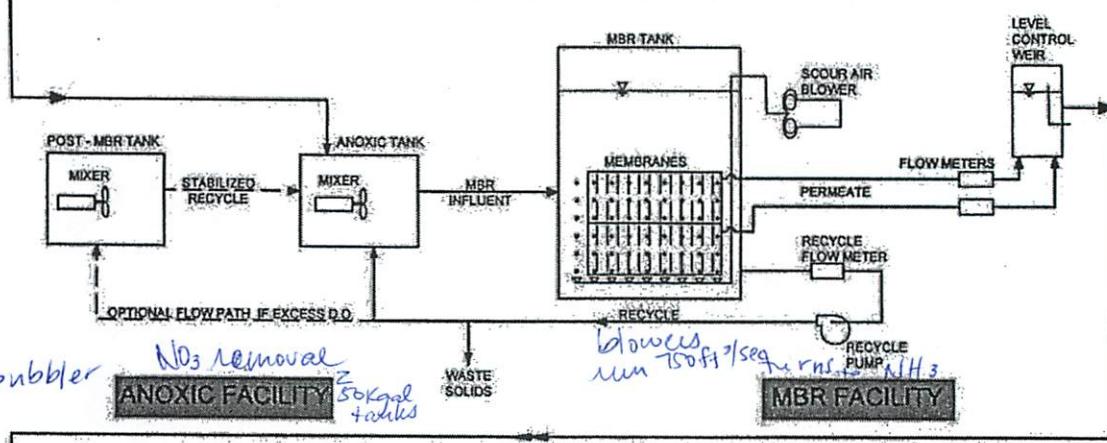
pre-air → anox → mbr

turbidity & flow are key indicators
 $\text{if } \text{TTI} @ 5 = \text{problem}$
 $20^{\circ}\text{C MSSR} = \text{too high}$
 may be issue.
 look at.

PROCESS OVERVIEW



gravity system
 hot vacuum system.
 Tmp more useful for
 vacuum system.



Class A sludge drying
 $45\text{ days MSSS} - 11,000\text{ ideal}$

Turbidity monitor tells you if a plate is busted
 Tmp - if it drops off, tells you filters
 need to be cleaned

currently 200 k/day

up to 2000 g/min
 high v, low pump
 to hic channel

The membrane filtering process

The membranes inside the MBR tank form a physical barrier to "trap" the biological treatment process within the plant. Figure 2D below shows the main components of the MBR filter system.

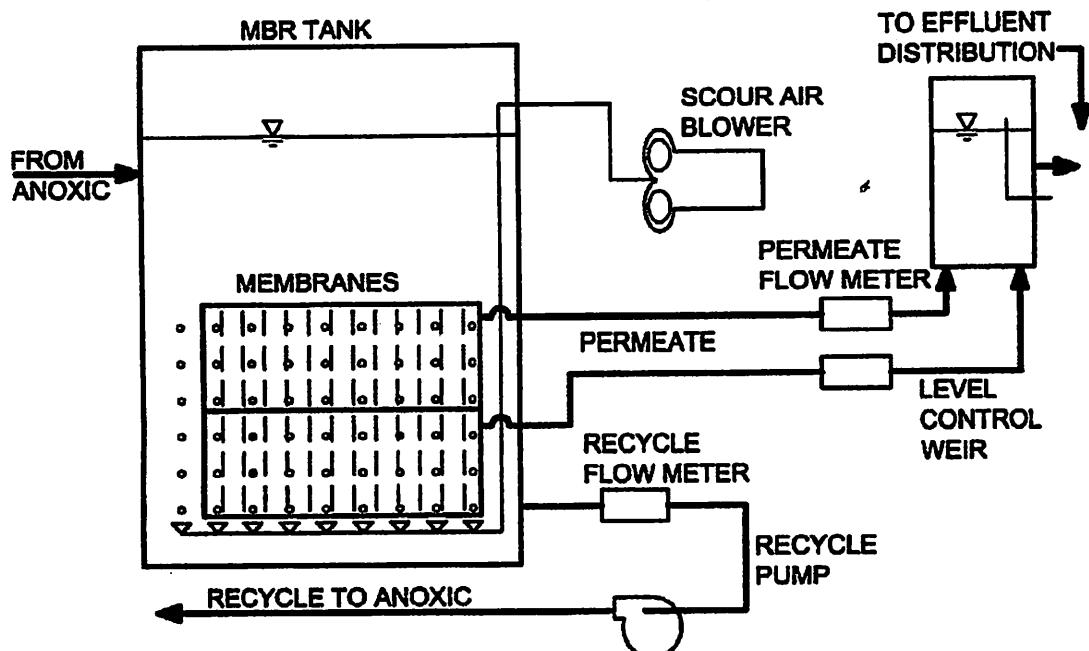


FIG 2D: MBR FACILITY